1. What value of x satisfies the equation below?

$$-2(x+5)=12$$

-11

2. What value of x satisfies the equation below?

$$\frac{1}{3}(x-4)=3x+\frac{5}{2}$$

-23/16

3. What value of y satisfies the system of equations below?

$$\begin{cases} x+y=2 \\ x-y=8 \end{cases}$$

-3

4. What is the x-intercept of the line below?

$$y=\frac{2}{3}x-5$$

15/2

5. What is the equation of the line that passes $(2, 4)$ and $(-3, -2)$? $y = \frac{6}{5}x - \frac{8}{5}$

6. What is the equation of the line that is perpendicular to $3x - 4y = 7$ and passes $(0, -3)$? $y = -\frac{4}{3}x - 3$

7. If the values of x, y satisfy the system of equations below , what is the value of $x - y$?

$$\begin{cases} x + 3y = 23 \\ 4x - 8y = 7 \end{cases}$$

4

8. If Simon's farm has total 11 of ducks and sheep and the sum of their leg is 28. How many sheep are in the farm? 3

9. If Isla has a bag containing 35 dimes and quarters. The total value of these coins is \$5.45. What is the number of quarters she has? 13

10. What is the factored form of the expression below?

$$12x^2 - 50x - 18$$

$2(3x + 1)(2x - 9)$

11. What is the sum of all valules of x of the equation below?

$$x^2 - 5x - 24 = 0$$

5

12. What is the 33rd term of the sequence below?

$$12, 15, 18, 21, 24, 27, ...$$

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